

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number  
**WO 2005/012346 A1**

(51) International Patent Classification<sup>7</sup>: **C07K 14/62**,  
14/765, A61P 3/10, C07K 1/113, A61K 38/28, A61P 5/50

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(21) International Application Number:  
PCT/CA2004/001409

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AI, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(22) International Filing Date: 26 July 2004 (26.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/490,110 25 July 2003 (25.07.2003) US  
60/556,585 25 March 2004 (25.03.2004) US

(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

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**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: **LONG LASTING INSULIN DERIVATIVES AND METHODS THEREOF**

(57) Abstract: The present invention relates to an insulin derivative comprising an insulin molecule and a reactive group for covalently bonding a blood component, wherein preferably the insulin molecule is human natural insulin molecule and the reactive group is coupled to an amino acid of the insulin molecule at a position selected from the positions Gly A1, Phe B1 and Lys B29.

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